REMARKS

Upon entry of this amendment, claims 24-52 are all the claims pending in the application. Claims 1-23 are canceled by this amendment. Claims 24-52 are added as new claims. No new matter has been added.

Applicants note that a number of editorial amendments have been made to the specification for grammatical and general readability purposes. No new matter has been added.

I. Objection to the Claims

The Examiner has objected to claim 23 for the reasons set forth on page 2 of the Office Action. As noted above, claim 23 has been canceled by this amendment, thereby rendering this rejection moot.

II. Claim Rejections

The Examiner has set forth the following claim rejections in the Office Action:

Claims 1, 3 and 6 were rejected under 35 U.S.C. § 102(b) as being anticipated by Garay et al. (U.S. 4,313,119); claims 2, 5 and 7-9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Garay et al. in view of Ying et al. (U.S. 6,307,511); claim 4 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Garay et al. in view of WO 99/04500; claim 10 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Garay et al. in view of JP 2001-156898; and claims 13 and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Garay et al. in view of Ali (US 6,885,880).

Claims 1-23 have been canceled and are replaced with new claims 24-52 in order to further distinguish the present invention from the references applied by the Examiner. Therefore,

the above-mentioned rejections are submitted to be inapplicable to the new claims for at least the following reasons.

Claim 24 recites the features of a hinge portion that comprises first and second hinge parts which engage with each other so as to be rotatably slidable, wherein the first hinge part is made of an electrically conductive material and is electrically connected with a housing electrical conductor portion, wherein the second hinge part is made of an electrically conductive material and is electrically connected with a feeding point of a radio communication circuit provided in the lower housing of the apparatus, and wherein the housing electrical conductor portion is electrically coupled with the feeding point of the radio communication circuit through the first and second hinge parts in both of the open state and the closed state of the apparatus.

Applicants respectfully submit that the cited prior art references, either alone or in combination, fail to disclose, suggest or otherwise render obvious at least the above-noted features recited in new claim 24.

Regarding Garay, Applicants note that this reference discloses a dual mode transceiver antenna which includes a U-shaped planar conductive antenna made of two segments 21 and 22, which is shaped to fit over a casing 20 which houses a radio transceiver therein (see Figs. 2 and 3, and col. 2, lines 55-59). In Garay, a hinge 24 is positioned at the top end opposite the open end of the U-shaped loop antenna (see Fig. 3 and col. 3, lines 1-3). The antenna also includes a dipole antenna element 26 coupled to the first antenna segment 21 of the U-shaped antenna by a hinge 24 (see Fig. 3 and col. 2, lines 65-67).

As shown in Figs. 3 and 4 of Garay, the hinge 24 is connected to the first antenna segment 21 such that a space is formed so as to separate the first antenna segment 21 from the second antenna segment 22 when the dipole element 26 is in an open position (see Fig. 3 and col.

3, lines 3-12). In this configuration, the antenna is in the dipole mode with the dipole element 26 in the open or unfolded position as shown in Figs. 3 and 4 (see col. 3, lines 46-48).

Conversely, when the dipole element 26 is rotated about the hinge 24 so as to be in the closed position, the antenna is in a loop mode operation (see Fig. 5 and col. 3, lines 67-68). When the dipole element 26 is folded over in this manner, contacts 45 and 46 come in contact with one another to provide an electric short (see col. 3, line 68 - col. 4, line 2).

In view of the foregoing description of Garay, Applicants respectfully submit that while Garay discloses a dipole element 26 that rotates about a hinge 24 so as to be in a closed position or an open position, Garay does not disclose or suggest the above-noted features recited in new claim 24.

In particular, Applicants respectfully submit that Garay does not disclose or suggest the features of a hinge portion that comprises first and second hinge parts which engage with each other so as to be rotatably slidable, wherein the first hinge part is made of an electrically conductive material and is electrically connected with a housing electrical conductor portion, wherein the second hinge part is made of an electrically conductive material and is electrically connected with a feeding point of a radio communication circuit provided in the lower housing of the apparatus, and wherein the housing electrical conductor portion is electrically coupled with the feeding point of the radio communication circuit through the first and second hinge parts in both of the open state and the closed state of the apparatus.

In view of the foregoing, Applicants respectfully submit that Garay does not disclose or suggest at least the above-noted features recited in new claim 24. Further, Applicants respectfully submit that Garay, in combination with the other cited prior art references, does not render obvious the above-noted features recited in new claim 24.

Regarding Ying, Applicants note that this reference discloses a portable communication device 10 having a housing 12 and a foldable flip 14 which can pivot about a hinge mechanism 26 (see Fig. 2 and col. 3, lines 5-7). In addition, Ying discloses the use of a printed antenna 40 arranged on the foldable flip 14, wherein the printed antenna 40 is connected to radio circuitry inside the housing 12 (see Fig. 2 and col. 3, lines 46-55)

Applicants respectfully submit, however, that while Ying discloses a flip 14 that can rotate about a hinge 26, Ying does not disclose or suggest the above-noted features recited in new claim 24. Further, Applicants respectfully submit that Ying, in combination with the other cited prior art references, does not render obvious the above-noted features recited in new claim 24.

Regarding WO 99/04500, Applicants note that this reference discloses a hand-held telephone, wherein a housing thereof includes a folding/sliding component that is flipped or slid open during operation of the device (e.g., see Figs 1 and 5).

Applicants respectfully submit, however, that while WO 99/04500 discloses a folding/sliding component, this reference does not disclose or suggest the above-noted features recited in new claim 24. Further, Applicants respectfully submit that WO 99/04500, in combination with the other cited prior art references, does not render obvious the above-noted features recited in new claim 24.

Regarding JP 2001-156898, Applicants note that this reference discloses a hand-held telephone that has a receiver 7, a backlight 8 and a display part buried in holes 4-6 opened in the antenna 3 which is incorporated in an upper case 1 (see Abstract).

Applicants respectfully submit, however, that while JP 2001-156898 discloses an antenna 3 formed in an upper case 1 having holes formed therein, JP 2001-156898 does not disclose or

suggest the above-noted features recited in new claim 24. Further, Applicants respectfully submit that JP2001-156898, in combination with the other cited prior art references, does not render obvious the above-noted features recited in new claim 24.

Regarding Ali, Applicants note that this reference discloses a mobile terminal having hinges 172 and/or 174 that act as antennas (see col. 5, lines 24-26). As shown in Fig. 4 of Ali, the hinge 172 is attached to a printed circuit board 190 by two fasteners 206, 208, one of which acts as a connection to the ground plane of the printed circuit board 190 (see col. 5, lines 51-58).

Applicants respectfully submit, however, that while Ali discloses a hinge that is able to act as an antenna, Ali does not disclose or suggest all of the above-noted features recited in new claim 24. Further, Applicants respectfully submit that Ali, in combination with the other cited prior art references, does not render obvious the above-noted features recited in new claim 24.

In view of the foregoing, Applicants respectfully submit that the cited prior art references, either alone or in combination, fail to disclose, suggest or otherwise render obvious all of the features recited in new claim 24. Accordingly, Applicants submit that claim 24 is patentable over the cited prior art, an indication of which is kindly requested. Claims 28, 32, 36, 40, 44, 48 and 50 depend from claim 24 and are therefore considered patentable at least by virtue of their dependency.

Regarding independent claims 25-27, Applicants note that each of these claims recites at least the same features as noted above with respect to claim 24. That is, each of claims 25-27 recites the features of a hinge portion that comprises first and second hinge parts which engage with each other so as to be rotatably slidable, wherein the first hinge part is made of an electrically conductive material and is electrically connected with the housing electrical conductor portion, wherein the second hinge part is made of an electrically conductive material

and is electrically connected with a feeding point of a radio communication circuit provided in the lower housing of the apparatus, and wherein the housing electrical conductor portion is electrically coupled with the feeding point of the radio communication circuit through the first and second hinge parts in both of the open state and the closed state of the apparatus.

For at least the same reasons as discussed above with respect to claim 24, Applicants respectfully submit that the cited prior art references, either alone or in combination, fail to disclose, suggest or otherwise render obvious such features.

In addition, Applicants note that claims 25 and 27 recite that a capacitive coupling is conducted through an electrical insulator having a predetermined capacitance in at least one of a location between the housing electrical conductor portion and the first hinge part and a location between the second hinge part and the feeding point of the radio communication circuit. Applicants respectfully submit that the cited prior art references also fail to disclose, suggest or render obvious this feature.

In view of the foregoing, Applicants respectfully submit that claims 25-27 are patentable over the cited prior art, an indication of which is kindly requested. Claims 29, 33, 37, 41, 45 and 49 depend from claim 25; claims 30, 34, 38, 42, 46 and 50 depend from claim 26; and claims 31, 35, 39, 43, 47 and 51 depend from claim 27. Accordingly, Applicants respectfully submit that these claims are patentable at least by virtue of their dependency.

III. Allowable Subject Matter

Applicants thank the Examiner for indicating that claims 11, 12, 14, 15 and 17-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in

independent form including all the limitations of the base claim and any intervening claims. As noted above, each of these claims has been canceled by this amendment.

IV. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may best be resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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